AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 19, line 21 with the following amended paragraph:

This rotational vibration can be used in the transduction of acoustic signals to vary the sound quality of a transduced signal in new ways. In transducer 300, only pure rotational vibration in the direction of arrow E is shown. However, vibrating hardware could be constrained so that relative rotational vibration and relative linear vibration are both present. For example, wire 304 could be constrained so that it is free to vibrate in a linear direction with [[to]] respect to the housing. The resultant signal in wire 304 would correspond to a vector sum of the linear and rotational vibration.

Please replace the paragraph beginning at page 23, line 1 with the following amended paragraph:

Coil 504 is an electric signal carrier that <u>is</u> coil shaped. It is common to use coil shaped carriers in electromagnetic transducers because this geometry allows a long length of current carrier to be in the greatest proximity to a moving magnetic field (e.g., moving permanent magnet, moving magnetic core) that is centered within the coil. In this embodiment, permanent magnet 510 vibrates relative to housing 502 and coil 504, but the design could be varied so that the coil vibrated relative to the housing in addition to or instead of the magnet. Preferably, for a transducer to be used to transduce the acoustic vibrations of an acoustic guitar, coil 504 has about 1000 windings of 42 gauge copper wire. The number of windings and the wire used to make the coil will vary with the specific application.

Please replace the paragraph beginning at page 23, line 15 with the following amended paragraph:

More particularly, permanent magnet 510 is fixed to central aperture 404 [[if]] of spring-like diaphragm 400 (see Figs. 4 and 6). This means that the magnet will move with the inner periphery 408 of spring-like diaphragm 400 as spring-like diaphragm 400 is driven to vibrate by externally-supplied vibration. As discussed above in connection [[wit]] with Fig. 4, external vibrations will cause the inner periphery of spring-like diaphragm 400 to vibrate linearly in the direction of arrow G and also to vibrate rotationally in the direction of arrow F (arrows F and G are shown in Fig. 5). This means that magnet 510 will also vibrate both linearly and rotationally.